

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
10 June 2004 (10.06.2004)

PCT

(10) International Publication Number  
WO 2004/049151 A3

(51) International Patent Classification<sup>7</sup>: G06F 3/06

(21) International Application Number:  
PCT/JP2003/015056

(22) International Filing Date:  
26 November 2003 (26.11.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
2002-342443 26 November 2002 (26.11.2002) JP

(71) Applicant (for all designated States except US): MAT-SUSHITA ELECTRIC INDUSTRIAL CO., LTD. [JP/JP]; 1006, Oazakadoma, Kadoma-shi, Osaka 571-8501 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): NINOMIYA,

Masako [JP/JP]; 2-8-12-503, Yokogawa-cho, Nishi-ku, Hiroshima-shi, Hiroshima 733-0011 (JP). YAMAMOTO, Youichi [JP/JP]; 3-15-14-902, Inokuchi, Nishi-ku, Hiroshima-shi, Hiroshima 733-0842 (JP).

(74) Agent: NAKAJIMA, Shiro; 6F, Yodogawa 5-Bankann 2-1, Toyosaki 3-chome, Kita-ku, Osaka-shi, Osaka 531-0072 (JP).

(81) Designated States (national): CN, KR, US.

(84) Designated States (regional): European patent (DE, FR, GB).

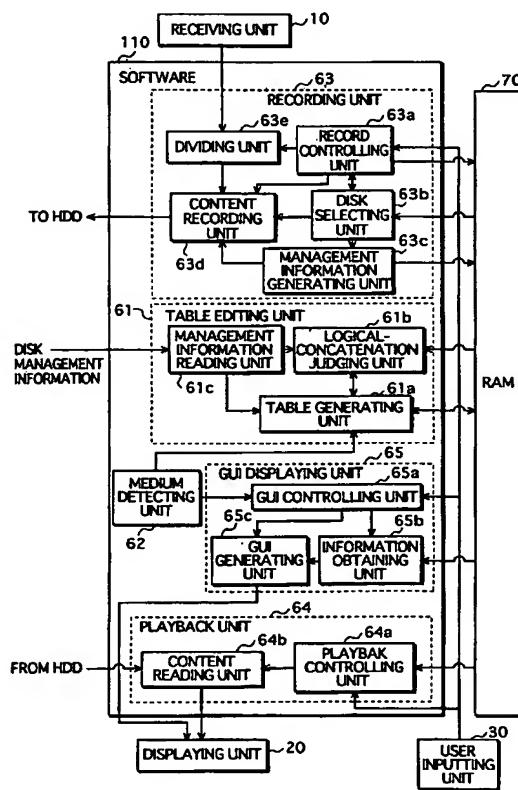
**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
7 April 2005

[Continued on next page]

(54) Title: APPARATUS FOR MANAGING REMOVABLE STORAGE MEDIA THAT CAN BE CONNECTED THERETO, AND METHOD, PROGRAM, AND SYSTEM LSI FOR MANAGING REMOVABLE STORAGE MEDIA



(57) **Abstract:** A storage media management apparatus includes a dividing unit 63e that divides a content into a plurality of content parts, a management information generating unit 63c that generates a plurality of pieces of content management information in correspondence to the plurality of content parts, each piece of content management information including (a) reconstruction information for reconstructing the content by concatenating a corresponding content part with the other content parts, and (b) individual information for making the corresponding content part individually usable, a content recording unit 63d that records each content part together with a corresponding piece of content management information onto a different one of the storage media, and a table editing unit 61 that judges whether the content is to be concatenated and made usable, or the content parts are to be individually made usable.



*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

|   |   |   |
|---|---|---|
| Applicant's or agent's file reference<br><br>P32890-P0    | <b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below. |   |
| International application No.<br><br>PCT/JP 03/15056      | International filing date (day/month/year)<br><br>26/11/2003  | (Earliest) Priority Date (day/month/year)<br><br>26/11/2002 |
| Applicant<br><br>MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD. |   |   |

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

contained in the international application in written form.

filed together with the international application in computer readable form.

furnished subsequently to this Authority in written form.

furnished subsequently to this Authority in computer readable form.

the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2.  **Certain claims were found unsearchable** (See Box I).

3.  **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

as suggested by the applicant.

because the applicant failed to suggest a figure.

because this figure better characterizes the invention.

10

None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 03/15056

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F3/06

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G11B G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category <sup>o</sup> | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No.                                      |
|-----------------------|---|--|
| X                     | PATENT ABSTRACTS OF JAPAN<br>vol. 017, no. 502 (P-1610),<br>9 September 1993 (1993-09-09)<br>-& JP 05 127956 A (NEC CORP),<br>25 May 1993 (1993-05-25)<br><br>the whole document<br>----- | 1,2,9,<br>10,13,<br>14,18,<br>19,26,<br>27,30,<br>31,35,36 |
| X                     | US 2002/056102 A1 (DILLON DOUGLAS ET AL)<br>9 May 2002 (2002-05-09)<br><br>paragraph '0032! - paragraph '0067!<br>figure 1<br>-----<br>-/-  | 1,2,9,<br>10,18,<br>19,26,<br>27,35,36                     |

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family,

Date of the actual completion of the international search

11 February 2005

Date of mailing of the international search report

21/02/2005

## Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Kochev, M

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 03/15056

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No.   |
|----------|--|-------------------------|
| X        | GB 2 312 317 A (* DISCREET LOGIC INC)<br>22 October 1997 (1997-10-22)<br>page 4, line 5 - line 25<br>page 6, line 25 - page 10, line 21<br>----- | 1, 9, 18,<br>26, 35, 36 |
| A        | EP 0 751 515 A2 (PIONEER ELECTRONIC<br>CORPORATION) 2 January 1997 (1997-01-02)<br>page 3, line 2 - page 4, line 54<br>-----                     | 1, 9, 18,<br>26, 35, 36 |

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP 03/15056

| Patent document cited in search report |    | Publication date |  | Patent family member(s)   |  | Publication date   |
|--|----|------------------|--|---|--|--|
| JP 05127956                            | A  | 25-05-1993       | NONE   |   |  |  |
| US 2002056102                          | A1 | 09-05-2002       | BR<br>BR<br>BR<br>EP<br>EP<br>MX<br>MX<br>MX<br>WO<br>WO<br>WO<br>US<br>US<br>US | 0106093 A<br>0106721 A<br>0106723 A<br>1269748 A2<br>1214841 A1<br>PA02000076 A<br>PA02000077 A<br>PA02000078 A<br>0182588 A2<br>0184826 A2<br>0182600 A2<br>2002092021 A1<br>2002040475 A1<br>2001033343 A1<br>2001033736 A1 |  | 07-05-2002<br>11-06-2002<br>21-05-2002<br>02-01-2003<br>19-06-2002<br>30-07-2002<br>30-07-2002<br>21-07-2003<br>01-11-2001<br>08-11-2001<br>01-11-2001<br>11-07-2002<br>04-04-2002<br>25-10-2001<br>25-10-2001 |
| GB 2312317                             | A  | 22-10-1997       | CA<br>US   | 2201692 A1<br>2002006265 A1   |  | 15-10-1997<br>17-01-2002   |
| EP 0751515                             | A2 | 02-01-1997       | JP   | 9017127 A   |  | 17-01-1997   |